

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

ART UNIT: 1795	<div style="border: 1px solid black; padding: 5px;"><p align="center"><b><u>CERTIFICATE OF MAILING</u></b> <b><u>UNDER 37 C.F.R. § 1.8</u></b></p><p>DATE OF DEPOSIT: <u>June 10, 2009</u></p><p>I hereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being submitted on the date indicated above via:</p><p><input checked="" type="checkbox"/> EFS Web</p><p><input type="checkbox"/> facsimile to _____</p><p><input type="checkbox"/> the United States Postal Service with sufficient postage as first class mail addressed to: Mail Stop _____ Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.</p><p align="center"><i>Brenda Wiseman</i> Brenda Wiseman</p></div>
EXAMINER: Martin J. Angebrannndt	
FIRST NAMED INVENTOR: Rolf Dessauer	
SERIAL NO.: 10/656,503	
FILED: 9/5/2003	
CONF. NO.: 8341	
FOR: PHTHALOCYANINE PERCURSORS IN INFRARED SENSITIVE COMPOSITIONS	
DOCKET NO.: 200310119-1	

**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Mail Stop Appeal Brief – Patents

Sir:

Appellants submit this Reply Brief in response to the Examiner's Answer mailed on April 14, 2009, and in connection with their Appeal Brief filed on December 9, 2008, which was filed in appealing the final rejection of the Patent Office, mailed July 21, 2008, in the above-identified application.

STATUS OF CLAIMS

Claims 1-25, 33-36, and 38-41 remain pending and are rejected. Claims 26-32 have been withdrawn. Claim 37 has been canceled. The claims on appeal in this application are claims 1-25, 33-36, and 38-41.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for review are:

- a. whether claims 1, 4-10, 12-15, and 39-41 are unpatentable under 35 U.S.C. § 103(a) as being obvious over RD 39219 and JP 58-008357, in view of U.S. Published Application No. 2001/0039895 of Kawauchi et al. (hereinafter “Kawauchi”) and/or U.S. Patent No. 5,470,816 to Satake et al. (hereinafter “Satake”);
- b. whether claims 1, 4-10, 12-15, 17, 20-22, 24, 25, and 39-41 are unpatentable under 35 U.S.C. § 103(a) as being obvious over RD 39219 and JP 58-008357 in view of U.S. Patent No. 5,362,536 to Fleming et al. (hereinafter “Fleming ‘536”) or WIPO Published Application No. WO 03/032299 of Anderson et al. (hereinafter “Anderson”);
- c. whether claims 1, 4-15, 17, 20-25, and 39-41 are unpatentable under 35 U.S.C. § 103(a) as being obvious over RD 39219 and JP 58-008357 in view of Fleming ‘536 and Anderson in further view of U.S. Patent No. 5,236,884 to Boggs et al. (hereinafter “Boggs”);
- d. whether claims 1-10, 12-22, 24, 25, and 39-41 are unpatentable under 35 U.S.C. § 103(a) as being obvious over RD 39219 and JP 58-008357, combined with Fleming and Anderson in view of either U.S. Patent No. 2,957,004 to Perkins et al. (hereinafter “Perkins”) or U.S. Patent No. 4,284,704 to Fleming et al. (hereinafter “Fleming ‘704”); and
- e. whether claims 1-10, 12-22, 24, 25, 33-36, and 38-41 are unpatentable under 35 U.S.C. § 103(a) as being obvious over RD 39219 and JP 58-008357, combined with Fleming ‘536, and Anderson and either Perkins or Fleming ‘704, further in view of U.S. Patent No. 4,508,811 to Gravsteijn et al. (hereinafter “Gravsteijn”) and Melles Griot Catalog (1995/96) pp. 49-4 through 49-5.

## ARGUMENT

The arguments set forth in this Reply Brief are provided in direct response to particular arguments set forth in the Examiner's Answer mailed April 14, 2009 (hereinafter "the Answer").

Therefore, any arguments presented by Appellants over the prosecution of the present application or in Appellants' Appeal Brief but not repeated here are not to be construed as having been disavowed or withdrawn by Appellants absent an explicit statement to the contrary.

The Examiner begins the Answer by reprising Appellants' position, and then asserting that because the claims are not method claims, "the exact process need not be shown in the references, but it must be clear from the rejection that the function limitation are met (*sic*)."

Appellants concur that method claims are not at issue here, and that Appellants are not claiming the steps of a process. However, Appellants assert again that the recitation "configured for development in less than about 1 msec when exposed to about 30 mW to about 50 mW of infrared radiation at a spot size from about 1  $\mu\text{m}$  to about 200  $\mu\text{m}$ " (underlining added) is a limitation of every claim at issue and must therefore be shown in the references, or be obvious therefrom, to establish a proper *prima facie* case under 103.

The Examiner's preliminary assertion appears intended to evade the burden of establishing that these elements are taught or suggested in the prior art. The Examiner then offers a complex construction of the prior art teachings based on heating temperatures and component percentages. Appellants note that neither of these things is recited by Appellants' claims. Appellants submit that the Examiner's discussion of RD 39219 and JP 58-00835 still fails to establish that the compositions of the claims at issue are taught or suggested by these primary references in combination with the secondary references cited.

The Examiner has suggested that “the evidence in the record clearly shows that the compositions [disclosed in RD 39219 and JP 58-008357] are more thermally sensitive than that of the inventive example.” The Examiner bases this assertion on a number of conclusions. Appellants question or disagree with many of these conclusions, as discussed below.

1. The Examiner states that “the sole example of the instant specification (pages 18-19 of the instant specification) combines the precursor with ~6.7 wt% of the IR dye.” First, this statement regarding the example in Appellants’ specification (found at pages 20-21) is of questionable basis. In the actual example, 1.1 g of precursor is combined with 0.4 g of IR absorber in a solution of 4.57 g of cellulose acetate butyrate (381-0.5) and 40 g of butanone-2. It is unclear to how the Examiner’s statement of the composition refers to this example. For example, it is unclear to what the Examiner refers as “the IR dye” or to what relative quantities “~6.7 wt%” refers, as it does not correspond to the amount of absorber or any other component in the example.

The Examiner then states that this composition should be similar in sensitivity to that of Example 5 in US 2772284, “requiring heating at ~200 °C.” Appellants submit that the Examiner has not established a factual basis for this assertion. Furthermore, Appellant submits that this assertion is illustrative of the Examiner’s arguments in the Answer, i.e. they are based on alleged parameters in the prior art that are not dispositive of a teaching of the actual elements of Appellants’ claims.

The Examiner goes on to suggest that the compositions in RD 39219 and JP 58-008357, which teach a lower development temperature, would develop faster than that of US 2772284 if heated at 200 °C. The Examiner then concludes that because all three of these references teach

reducing agents, they must be more sensitive than the composition exemplified in Appellants' specification. Once again, Appellant asserts that none of this establishes that RD 39219 and JP 58-008357 teach configuration for "development in less than about 1 msec when exposed to about 30 mW to about 50 mW of infrared radiation at a spot size from about 1  $\mu\text{m}$  to about 200  $\mu\text{m}$ " as required by independent claims 1, 16, 17, and 33. These are very specific development parameters that are significant in with respect to the Applicant's claimed invention, as they allow for very fast recording with a laser on a spinning disk in one embodiment. The prior art does not need this type of fast development. Furthermore, regarding the fact that US 2772284 clearly teaches heating at 200 °C for fifteen minutes, the Examiner states that coloration may have occurred before this time was completed. Appellants submit that this possibility, even if true, is far from establishing that the rapid development required by the claims is inherent in the prior art.

2. In discussing the issue of "configured to" as recited in the claims, the Examiner discusses the various physical arrangements of materials in the references. Appellants point out that, while such an arrangement can be a factor in how a color forming composition behaves, Appellants did not contend that "configured to" rests purely on physical arrangement. As Appellants have discussed, the sensitivity of such color forming compositions is a function of a number of factors, including the nature and properties of the infrared absorber, phthalocyanine precursor, and binder, as well as the relative concentrations of each. Thus, there are both structural and compositional concerns. As the cited references fail to teach or fairly suggest that the compositions disclosed therein exhibit the characteristics required by Appellants' claims,

Appellants submit that those disclosures do not teach or suggest that the compositions are configured according to the claims.

3. In the Final Office Action, the Examiner argued that the teaching of IR absorber present in amounts of ~4% would “inherently sensitize the compositions within the bounds of the claims.” In the Appeal, Appellants have stated that merely pointing to an amount of an IR absorber without accounting the above considerations does not reflect on the sensitivity of the color forming composition as a whole. In response to this argument, the Examiner’s Answer again points to amounts taught in Satake and Kawauchi assert that they exceed amounts taught as preferred in Appellants’ specification. Appellants reiterate, however, that the teaching of a particular amount of any given absorber in a composition is not dispositive of the fact that the composition will meet the requirements of claims 1, 16, 17, and 33. In fact, too much of one substance over others may, in fact, hinder the development time. Often, there is a balance of materials that allows for appropriate development time.

4. In discussing the alleged teaching of RD 39219 and JP 58-008357, the Examiner makes a number of further assertions which Appellant submit are erroneous. For example, the Examiner also submits that spectral sensitivity is not at issue with respect to claims 1, 16, and 17 because particular wavelengths are not recited in these claims. Appellants point out that sensitivity is specified in these claims by the recitation of “infrared radiation” and the exposure time, intensity, and spot size, a combination which Appellants assert is not found in the references in this combination. The Examiner goes on to assert that exposure times are not recited in the claims. Appellants respond that it is development time that is recited and that must

be established as present in the references to support a *prima facie* case. The Examiner's further suggestion that this development time is inherent in the prior art compositions is based on speculation that does not rise to the standard of a *prima facie* case of obviousness.

Appellants again submit that a *prima facie* case of obviousness has not been presented and therefore respectfully request that the Board overturn the present rejections.

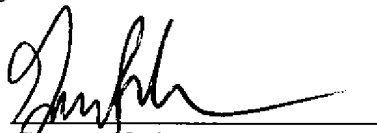


CONCLUSION

Appellants respectfully submit that the claims on appeal are patentably distinct from the asserted prior art references. Particularly, none of the asserted combinations of references would teach one of ordinary skill in the art within the meaning of 35 U.S.C. § 103(a) to arrive at the presently claimed invention. Appellants contend that the various combinations with RD 39219 and JP 58-008357 fail to teach each and every element of the claimed invention, and that a *prima facie* case of obviousness has not been established.

For at least these reasons, Appellants respectfully request that the Board of Appeals reverse the rejection and remand the case to the Examiner for allowance.

Dated this 10<sup>th</sup> day of June, 2009

  
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